

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A stimutable phosphor sheet comprising:

- a stimutable phosphor layer containing a europium-activated cesium bromide based stimutable phosphor as a main ingredient, said stimutable phosphor layer being formed by a vacuum film forming technique; and
- a substrate supporting said stimutable phosphor layer;
- a reflective film formed between said substrate and said stimutable phosphor layer, said reflective film for improving efficiency of emergence of stimulated light emission; and
- a barrier film formed between said reflective film and said stimutable phosphor layer, said barrier film for preventing oxidation of said reflective film,

wherein a maximum intensity of emission that is generated in a wavelength range of 490-510 nm when said stimutable phosphor layer is exposed to electron beams is lower than a maximum intensity of the emission generated in a wavelength range of 440-460 nm.

2. (currently amended): The stimutable phosphor sheet according to claim 1, further comprising: ~~wherein a said reflective film formed between said substrate and said stimutable phosphor layer, said reflective film for improving efficiency of emergence of stimulated light~~

emission is a thin film made of one of Al, Al alloys, Ag and Ag alloys, and a film thickness of said reflective film ranges from 0.01 μ m to 5 μ m.

3. (currently amended): ~~The A~~ stimulable phosphor sheet according to claim 2,
comprising:

a stimulable phosphor layer containing a europium-activated cesium bromide based
stimulable phosphor as a main ingredient, said stimulable phosphor layer being formed by a
vacuum film forming technique;

a substrate supporting said stimulable phosphor layer; and

a reflective film formed between said substrate and said stimulable phosphor layer, said
reflective film for improving efficiency of emergence of stimulated light emission,

wherein a maximum intensity of emission that is generated in a wavelength range of
490-510 nm when said stimulable phosphor layer is exposed to electron beams is lower than a
maximum intensity of the emission generated in a wavelength range of 440-460 nm,

wherein said reflective film is a thin film made of one of Al, Al alloys, Ag and Ag alloys,
and a film thickness of said reflective film ranges from 0.01 μ m to 5 μ m.

4. (canceled).

5. (currently amended): The stimulable phosphor sheet according to claim **[[4]] 1**,
wherein said barrier film is a thin film made of one of silicon oxides, titanium oxides, silicon

nitrides, cerium oxides and magnesium fluorides, and a film thickness of said barrier film ranges from 0.01 μm to 5 μm .

6. (canceled).

7. (currently amended): ~~The~~ A stimuable phosphor sheet according to claim 6, comprising:

a stimuable phosphor layer containing a europium-activated cesium bromide based stimuable phosphor as a main ingredient, said stimuable phosphor layer being formed by a vacuum film forming technique;

a substrate supporting said stimuable phosphor layer; and
a barrier film formed on said stimuable phosphor layer, said barrier film for preventing oxidation of said stimuable phosphor layer,

wherein a maximum intensity of emission that is generated in a wavelength range of 490-510 nm when said stimuable phosphor layer is exposed to electron beams is lower than a maximum intensity of the emission generated in a wavelength range of 449-460 nm.

wherein said barrier film is a thin film made of one of silicon oxides, titanium oxides, silicon nitrides, silicon oxynitrides, cerium oxides and magnesium fluorides, and a film thickness of said barrier film ranges from 0.01 μm to 5 μm .

8. (original): The stimuable phosphor sheet according to claim 1, wherein said stimuable phosphor layer is a layer containing as said main ingredient a cesium bromide based stimuable phosphor using europium as an activator, and a molarity ratio between said activator and said cesium bromide based stimuable ranges from 0.0005:1 to 0.01:1.

9. (original): The stimuable phosphor sheet according to claim 1, wherein a film thickness of said stimuable phosphor layer ranges from 50 μm to 1000 μm .

10. (original): The stimuable phosphor sheet according to claim 1, wherein said maximum intensity of the emission generated in the wavelength range of 490-510 nm is equal to or lower than 70% of said maximum intensity of the emission generated in the wavelength range of 440-460 nm.

11. (original): The stimuable phosphor sheet according to claim 1, wherein said maximum intensity of the emission generated in the wavelength range of 490-510 nm is equal to or lower than 50% of said maximum intensity of the emission generated in the wavelength range of 440-460 nm.

12.-14. (canceled)

15. (previously presented): A method of producing stimuable phosphor sheet which comprises: a stimuable phosphor layer containing a europium-activated cesium bromide based stimuable phosphor as a main ingredient, said stimuable phosphor layer being formed by a vacuum film forming technique; and a substrate supporting said stimuable phosphor layer, wherein a maximum intensity of emission that is generated in a wavelength range of 490-510 nm when said stimuable phosphor layer is exposed to electron beams is lower than a maximum intensity of the emission generated in a wavelength range of 440-460 nm, said method comprising:

- a step of preparing said substrate in a film forming system;
- a step of evaporating both of europium and cesium bromide by using a resistance heating in said film forming system;
- a step of performing evaporation under an evaporation atmosphere in a range of 0.01-3Pa to form said stimuable phosphor layer in said film forming system;
- a step of heating said substrate during said evaporation; and
- a step of annealing said stimuable phosphor layer after it was formed on said substrate, wherein a heating temperature for heating said substrate is in a range of 120-250°C and a heating temperature for annealing said stimuable phosphor layer is in a range of 150-250°C.